CORRESPONDENCE

Aircraft Noise and the Risk of Stroke

A Systematic Review and Meta-Analysis

by Dr. rer. medic. Verena Maria Weihofen, MPH; Dr. rer. biol. hum. Janice Hegewald, M. Sc.;
Dr. med. Ulrike Euler, M. Sc.; Prof. Dr. med. habil. Peter Schlattmann, M. Sc.; Prof. Dr. med. Hajo Zeeb, M. Sc.;
and Prof. Dr. med. Andreas Seidler, MPH in issue 14/2019

Noise Pollution From Small Planes

I was pleased to see that the *Deutsches Ärzteblatt* has tackled this neglected and highly relevant topic. Our world is indeed becoming ever noisier, and in subtle ways, and politicians have thus far not paid adequate attention to this problem. One aspect that has received little attention is increasing noise nuisance caused by small aircraft and other such devices that colonize the airspace.

I live near Heidelberg, where so-called leisure pilots increasingly fly their rounds; in particular, at times (evenings and weekends) when "normal citizens" may like to enjoy the good weather in their gardens. Such small planes produce a level of noise that far exceeds that generated by average road traffic. In addition to the obvious injustice/unfairness—why a minority is allowed to tyrannize the majority, just to have fun—and the resultant increases in blood pressure with all their consequences for people's health, the question that arises is why politicians have not focused more intensely on this problem. Such kinds of non-auditory noise effects are going to increase drastically in the future. We can expect that in future, our public airspace will be used not only by sports aircraft and tourist helicopters, but also by air taxis and drone transports, as has already been grandiosely announced by our transport minister, very much in accordance with economic interests and such like. Regulations are urgently needed, in the interests of our population and their health.

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References

1. Weihofen VM, Hegewald J, Euler U, Schlattmann P, Zeeb H, Seidler A: Aircraft noise and the risk of stroke—a systematic review and meta-analysis. Dtsch Arztebl Int 2019; 116: 237–44.

Prof. Dr. med. Olaf Müller, MPH
Heidelberg Institute of Global Health
Medical School, Ruprecht-Karls-University Heidelberg, Germany
Marsilius Arkaden
olaf.mueller@urz.uni-heidelberg.de

In Reply:

We are delighted at the positive response to our article (1) and express our warmest thanks to Prof. Müller, who raises important current aspects. He quite rightly points out that research on the effects of environmental noise should not be restricted to the health effects of "average" noise—as reflected by average sounds levels. For this reason, we made it clear in our article (as we have done in other publications [2]) that for assessing aircraft noise, particular attention should (also) be paid to maximum noise levels. The same is likely to be true for the small aircraft and helicopters mentioned by Prof. Müller. However, next to no research results have been published on this topic. We agree with Prof. Müller explicitly that research should not be restricted to the "classic" types of traffic noise. Future use of airspace and related health consequences of noise constitute an important topic for research and preventive regulation.

At this point, please allow us to mention a related topic that has barely been discussed in scientific discourse to date. Research into noise-related extraaural disease risks should not be restricted to single sources of noise. In addition to the comprehensive consideration of different—and also new—sources of noise, it is crucial to consider the combined effect of various noise sources. Our own research results suggest that, if several noise sources add up to a combined effect, the health risks could be considerably higher than expected from the common energetic summation of the noise pressure levels (3) .

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Corresponding author
Dr. rer. medic. Verena Weihofen, MPH
Institute and Policlinic of Occupational and Social Medicine
Faculty of Medicine Carl Gustav Carus, Technische Universität Dresden, Germany
Verena_Maria.Weihofen@tu-dresden.de

Conflict of interest statement
The authors of all contributions declare that no conflict of interest exists.